

While Applicants fully disagree with the rejection, it is also believed the rejection has been obviated by the amendments made herein.

Accordingly, the rejection should be withdrawn. See, for instance, *In re Marshall*, 198 USPQ at 346 ("[r]ejections under 35 USC 102 are proper only when the claimed subject matter is identically disclosed or described in the prior art.").

Claims 18-22 were rejected under 35 U.S.C. 103 over Giesecke (U.S. Patent 4,568,570) or Matuzaki et al. (U.S. Patent 4,734,299). In the Office Action, it is acknowledged that the cited documents do not disclose use of silver (II). However, the position is taken that use of silver (II) would have been obvious. The rejection is traversed.

The entire thrust of both the Giesecke and Matuzaki et al. documents is to use of silver (I). Nowhere do the documents mention use of silver (II), or provide any indication that such use might provide an operable system.

Thus, for instance, the Matuzaki et al. document states the following at column 2, lines 11-15 (bold emphasis added):

According to the invention, there is provided a sensitizing agent for the electroless plating which comprises a solution of at least one of palladium (II), silver (II), copper (I), copper (II), and nickel (II) compounds dissolved in an amide.

Similarly, the Giesecke document states the following at column 1, lines 52-61:

According to the invention, such a "seeding" is now achieved by a process in which

- (a) the surface to be metallised is wetted with an activating solution containing a silver-I compound which is sparingly soluble in water and has been converted into a soluble form with the aid of complexing agents,
- (b) the soluble complex compound is split back into the sparingly soluble silver-II compound and
- (c) the silver-I compound remaining on the surface of the substrate is reduced.

Accordingly, in the absence of any disclosure, in fact the specific direction of the cited art away from Applicants' claimed system, the rejection is not proper. See, for instance, the Manual of Patent Examining Procedure §2143.03 ("To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.").

Moreover, Applicants specifically demonstrate successful use of silver (II) in the processes of the invention. See Examples 1 through 4 at pages 11 through 15 of the application.

In view thereof, reconsideration and withdrawal of the rejection are requested.

Claims 4, 6, 23-27, 30 and 31 were rejected under 35 U.S.C. 103 over Giesecke (U.S. Patent 4,568,570) or Matuzaki et al. (U.S. Patent 4,734,299) in combination with Kunzig (U.S. Patent 4,298,636) or Feldstein (U.S. Patent 4,321,285).

As grounds for the rejection, the position is taken that "it would have been obvious for one skilled in art at the time the invention was made to have modified Giesecke (4,568,570) or Matuzaki et al. (4,734,299) process by incorporating the activating metals as detailed in Kunzig (4,268,636) or Feldstein (4,321,285)."

The rejection is traversed.

The deficiencies of the Giesecke and Matuzaki et al. have been discussed above and are incorporated here. The entire thrust of those documents is to use of silver (II) in certain methods.

Also, as discussed in Applicants' Appeal Brief, Feldstein is directed to a colloidal systems and specifically teaches against any combination with Kunzig..

Thus, Feldstein states the following at column 3, lines 6-8:

It is another object to provide a process the nature of which the necessity of using noble metals is eliminated.

Kunzig, however, is specifically directed to use of noble metals. Thus, Kunzig states the following ((column 1, lines 45-52; bold emphasis added):

It is another object to activate plastic surfaces for subsequent metallization with noble metal nucleic by a process which employs nonpolluting materials which can be handled without excessive expenditures for equipment.


Yet another object is to provide a process for nucleating plastic surface with a noble metal without the generation of toxic or otherwise dangerous vapors.

Moreover, Kunzig is specifically directed to a palladium system. See, for instance, Kunzig at column 3.

In view thereof, reconsideration and withdrawal of the rejection are requested.

It is believed the application is in conditions for immediate allowance, which action is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'P. Corless', written over a horizontal line.

Peter F. Corless (Reg. 33,860)  
EDWARDS & ANGELL, LLP  
*Dike, Bronstein, Roberts & Cushman IP Group*  
P.O. Box 9169  
Boston, MA 02209  
(617) 439-4444

MARKED VERSION TO SHOW CHANGES

1. (twice amended) A process for metal deposition, the process comprising providing an aqueous solution comprising a non-colloidal metal activator, contacting a part to be plated with the aqueous solution of the metal activator for a time sufficient for the metal activator to adsorb onto the part, the metal activator selected from the group consisting of silver, cobalt, ruthenium, cerium, iron, manganese, nickel, rhodium and vanadium, contacting the part with a reducing agent capable of reducing the metal activator to a lower oxidation state, and metal plating the part by contact with a plating solution.
2. (twice amended) A process for electroless metal deposition of an organic resin part, comprising etching the part with reactive hydroxyl species while catalyzing the part with a non-colloidal electroless metal plating catalyst, and metal plating the part by contacting the part with an electroless metal plating solution, wherein the reactive hydroxyl species is generated by a metal activator selected from the group consisting of silver (II), cobalt, ruthenium, cerium, iron, manganese, nickel, rhodium, or vanadiumj.
5. A process of claim 1 or 2 [3] wherein the metal activator is silver.
6. (amended) A process of claim 1 or 2 [3] wherein the metal activator is cobalt.
28. (amended) A process for metal deposition, comprising oxidizing an aqueous solution comprising a metal activator, contacting a part to be plated with the aqueous solution of the oxidized metal activator for a time sufficient for the metal activator to adsorb onto the part, the metal activator selected from

the group consisting of silver (II), cobalt, ruthenium, cerium, iron, manganese, nickel, rhodium and vanadium; and

contacting the part with a reducing agent capable of reducing the metal activator to a lower oxidation state, and metal plating the part by contact with a plating solution.